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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,974	12/09/2003	Takeyoshi Hisada	06-003	2200
23400 7. POSZ LAW GR	590 03/13/200 ^r OUP. PLC	EXAMINER		
12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			WILLIAMS, ALEXANDER O	
			ART UNIT	PAPER NUMBER
1.251011, 1112			2826	
			<u>.</u>	
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MON	ITHS	03/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Action Communication	10/729,974	HISADA ET AL			
Office Action Summary	Examiner	Art Unit			
	Alexander O. Williams	2826			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on <u>04 De</u>	ecember 2006.				
2a) ☐ This action is FINAL . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) \boxtimes Claim(s) <u>1, 3-8 and 14</u> is/are pending in the ap	polication				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1,3-8 and 14</u> is/are rejected.		,			
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ⊠ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application					
Paper No(s)/Mail Date 6) Other:					

Art Unit: 2826

Serial Number: 10/729974 Attorney's Docket #: 06-003 Filing Date: 12/9/2003; claimed foreign priority to 12/19/2002

Applicant: Hisasa et al.

Examiner: Alexander Williams

Page 2

Applicant's Amendment filed 12/4/06 to the election of Group I (claims 1 to 8), filed 4/13/06, has been acknowledged.

Applicant's Declaration filed 12/4/06 has been acknowledged.

Claims 2 and 9-13 have been cancelled.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2826

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 5-8 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Terui (U.S. Patent # 6,472,732 B1).

- I. Terui (figures 1 to 19) specifically figure 7 show a metal wiring board 20 comprising a metal plate 21 as a substrate and a wiring portion 23,26 that functions as an electrical wiring, wherein: the metal plate is processed in a predetermined wiring pattern 23,26 including the wiring portion; the metal plate has a surface including a soldering area and a non-soldering area; the soldering area is a conductive area prepared for electrical connection; and the non-soldering area is an electrically isolated area coated with solder resist 27.
- 3. The metal wiring board according to claim 1, Terui show wherein the predetermined wiring pattern further includes a terminal portion for electrical connection with an external device.
- 5. The metal wiring board according to claim 1, Terui show wherein the solder resist coating on the non-soldering area is performed by solder resist printing.
- 6. The metal wiring board according to claim 1, Terui show wherein the wiring portions are held by a resin case **38,33** at ends thereof.
- 7. The metal wiring board according to claim 1, Terui show wherein the soldering are is prepared for soldering of a surface mount device **36,28** having leads **432,37** with a small pitch.
- 8. The metal wiring board according to claim 1, Terui show wherein: the metal plate includes a plurality of soldering areas; and the soldering areas are arranged so that a surface mount device bridges adjacent electrical wiring portions when soldered.
- 14. The metal wiring board according to claim 3, Terui show wherein the wiring portion is held by a resin case at ends thereof, and the terminal portion projects outside the resin case for electrical connection with the external device.

Page 3

Art Unit: 2826

(7) The copper plate 21 is provided on a rear surface with another insulating layer 25 of polyimide having a thickness of 10 to 30 .mu.m. Another copper wiring pattern 26 is formed on the insulating layer 25 to have a thickness of 12 to 35 .mu.m. Another solder resist 27 is formed (spread) over the copper wiring pattern 26 except some areas thereon. The substrate 20 includes the copper plate 21, insulating layers 22 and 25, copper wiring patterns 23 and 26.

Initially, and with respect to claim 4, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Terui (U.S. Patent # 6,472,732 B1).

4. The metal wiring board according to claim 1, Terui show wherein the processing of the metal plate id performed by stamping the metal plate.

As to the grounds of rejection under section 103, see MPEP § 2113.

Response

Applicant's arguments filed 12/4/06 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The insertion of Applicant's additional claimed language, for example, "in claim 1" cause for further search and consideration to make this action final.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. \ni 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. \ni 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION.

Art Unit: 2826

IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. → 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass:	6/6/06
257/e23.178,668,699,732,774,e23.004,e23.069,e23.101,e	3/4/07
23.14,e25.011,e25.013	
439/68,67,71	
361/836	
174/262	
Other Documentation:	6/6/06
foreign patents and literature in	3/4/07
257/e23.178,668,699,732,774,e23.004,e23.069,e23.101,e	
23.14,e25.011,e25.013	
439/68,67,71 ·	
361/836	
174/262	
Electronic data base(s):	6/6/06
U.S. Patents EAST	3/4/07

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O. Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander O Williams Primáry Examiner Art Unit 2826